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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,532	12/18/2001	Shih-Ping Liou	2000P09105US01	5551

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Siemens Corporation  
Intellectual Property Department  
186 Wood Avenue South  
Iselin, NJ 08830

EXAMINER

BILGRAMI, ASGHAR H

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/023,532

Applicant(s)

LIOU ET AL.

Examiner

Asghar Bilgrami

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1.1, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/18/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 28 objected to because of the following informalities: At the end of the claim the phrase "It will not only." does not seem to be a part of the claim language. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Grunenfelder et al (U.S. 6,697,701) and G.R. Rajugopal/R.H.M. Hafez (Non Patent Literature).

4. As per claims 1, 11, 16, 19, 21, & 24 Grunenfelder disclosed a method for frame streaming using intelligent frame selection comprising the steps of: ranking a plurality of frames according to a plurality of priorities; and selecting, during a run-time, a frame for transmission over a network to a receiving client (col.2, lines 36-49). However Grunenfelder did not explicitly disclose wherein selecting the frame comprises determining a time of transmission, wherein the time of transmission is the time the frame will take to reach the receiving client. In the same field of endeavor Rajugopal/Hafiz disclosed wherein the time of transmission is the time the frame will take to reach the receiving client (page.35, col.1, lines 49-54, col.2, lines 1-23).

It would have been obvious to one in the ordinary skill in the art to incorporate the time the frame would take to reach the receiver disclosed by Rajugopal/Hafiz as one of the criteria in selecting the frames for transmission as taught by Grunenfelder in order to overcome the unforeseen network congestions that may lie ahead in the path of the frame and thus making the delivery of the frame to the client receiver robust.

5. As per claims 2 & 23 Grunenfelder-Rajugopal/Hafiz disclosed the method of claim 1, further comprising the steps of determining a priority one frame according to a position in the video; and determining a priority two frame according to dynamic information in the video (Grunenfelder col.2, lines 66-67 & col.3, lines 1-17)

6. As per claim 3 Grunenfelder-Rajugopal/Hafiz disclosed the method of claim 2, wherein dynamic information comprises one of visual effects, camera motion, and object motion (Rajugopal/Hafiz, page34, col.1, lines 52-56, col.2, lines 1-8 & page.35, col.1, lines 8-30).

7. As per claim 4 Grunenfelder-Rajugopal/Hafiz disclosed the method of claim 1, wherein frames are ranked according to semantic information (Grunenfelder, col.2, lines 35-49 & col.8, lines 40-59).

8. As per claim 5 Grunenfelder-Rajugopal/Hafiz disclosed the method of claim 1, wherein semantic information is determined according to a table of contents (Grunenfelder, col.2, lines 35-49 & col.8, lines 40-59).

9. As per claims 6-10, 12 & 22 Grunenfelder-Rajugopal/Hafiz disclosed the method of claim 21, wherein the step of processing the frame further comprises the steps of: determining whether the frame can, arrive at a client in time, depending on a frame timestamp, an expected available bandwidth and a current time; and determining whether a next higher priority frame can arrive at the client in time, if the frame is sent to the client (Rajugopal/Hafiz, page.35, col.1, lines 49-54, col.2, lines 1-31).

10. As per claim 7 Grunenfelder-Rajugopal/Hafiz disclosed the method of claim 1, further comprising the step of determining a round-trip-time (Rajugopal/Hafiz, page.35, col.1, lines 49-54, col.2, lines 1-23).

11. As per claims 13-18, 20 & 25 Grunenfelder-Rajugopal/Hafiz disclosed the system of claim 24, wherein the streaming server comprises: a sorting module for sorting a plurality of frames (Grunenfelder, col.2, lines 50-65), according to timestamps, within a queue, wherein frames have one of three or more priorities; and a sending module for determining whether the top frame is to be sent to a client according to a latest start time of the frame (Grunenfelder, col.3, lines 58-67 & col.4, lines 1-17) .

12. As per claims 26, 28, 29 & 30 Grunenfelder-Rajugopal/Hafiz disclosed the system of claim 24, further comprising the streaming server further comprises: a controller for maintaining a control link to a client player via which the player can send request and statistics information; a

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server for delivering time-stamped frames; and a video server for delivering an audio track (Rajugopal/Hafiz, page.37, col.1, lines 22-52).

13. As per claim 27 Grunenfelder-Rajugopal/Hafiz disclosed the system of claim 26, wherein the controller selects a server to transmit frames and controls the servers providing the frames (Grunenfelder, col.2, lines 50-65).

14. As per claim 31 Grunenfelder-Rajugopal/Hafiz disclosed the system of claim 28, wherein the client player further comprises an audio/visual module for displaying content (Rajugopal/Hafiz, page.37, col.1, lines 22-52).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on M-F, 8:00-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Asghar Bilgrami  
Examiner  
Art Unit 2143

AB

Will C. Vaughn  
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